55. The method according to claim 16 wherein said laser light is irradiated with the semiconductor film exposed to the atmosphere.

56. The method according to claim 18 wherein said laser light is irradiated with the semiconductor film exposed to the atmosphere.

57. The method according to claim 19 wherein said laser light is irradiated with the semiconductor film exposed to the atmosphere.--

REMARKS

The Official Action mailed February 14, 2002 has been received and its contents carefully noted. Filed concurrently herewith is a *Request for Two Month Extension of Time* which extends the shortened statutory period for response to July 14, 2002. Accordingly, Applicant respectfully submits that this response is being timely filed.

Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on October 5, 1999, November 23, 1999 and April 2, 2001.

Claims 14-19 and 31-46 were pending in the present application. Claims 17, 37-38, 41-42 and 45-46 have been canceled, claims 14-16, 18-19 and 33-34 have been amended, and new claims 47- 57 have been added to recite additional protection to which Applicant is entitled. Thus, claims 14-16, 18-19, 31-36, 39-40, 43-44, and 47-57 are pending in the present application and claims 14-16 and 18-19 are independent.

The Official Action rejects claims14-19 and 31-46 as obvious based on various combinations of U.S. Patent 5,236,850 to Zhang; U.S. Patent 6,146,930 to Kobayashi et al.; U.S. Patent 5,147,826 to Liu et al.; U.S. Patent 5,773,227 to Yamazaki et al.; and JP 4-177735 to Yamazaki. The pending independent claims have been amended to recite that an oxide is formed on the semiconductor film by the irradiation of the laser light and that this oxide is removed from the crystallized semiconductor film. This feature is disclosed in the paragraph bridging pages 12-13 of the specification. It is respectfully submitted that the prior art of record fails to disclose or suggest this feature of the

invention and that a *prima facie* case of obviousness cannot be maintained in view thereof. Favorable reconsideration of the outstanding rejections is respectfully requested in view thereof.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,

Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
PMB 955
21010 Southbank Street
Potomac Falls, Virginia 20165
(571) 434-6789

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please cancel claims 17, 37-38, 41-42 and 45-46 and amend claims 14-16, 18-19 and 33-34 as follows:

14. (Twice Amended) A method for manufacturing a semiconductor device comprising [a semiconductor circuit, said method comprising the steps of]:

[forming a base film on a plastic substrate;]

forming an amorphous semiconductor film through a sputtering method on [the base film] an insulating surface; and

crystallizing the semiconductor film by irradiating the semiconductor film with a laser light [to form a crystalline semiconductor film,] wherein an oxide is formed on the semiconductor film by the irradiation of the laser light; and

removing the oxide from the crystallized semiconductor film,

wherein an inert gas is used as a sputtering gas in the sputtering method, said inert gas being at least one selected from the group consisting of Ar, He, Ne, N.

15. (Twice Amended) A method for manufacturing a semiconductor device comprising [a semiconductor circuit, said method comprising the steps of]:

forming an amorphous semiconductor film through a sputtering method [over a plastic substrate] on an insulating surface;

[adding a catalytic element into] applying a metal containing material to at least a portion of the semiconductor film, said [catalytic element] metal being capable of promoting crystallization; and

crystallizing the semiconductor film by irradiating the semiconductor film with a laser light [to form a crystalline semiconductor film,] wherein an oxide is formed on the semiconductor film by the irradiation of the laser light; and

removing the oxide from the crystallized semiconductor film,

wherein an inert gas is used as a sputtering gas in the sputtering method, said inert gas being at least one selected from the group consisting of Ar, He, Ne, N.

16. (Twice Amended) A method for manufacturing a semiconductor device comprising [a semiconductor circuit, said method comprising the steps of]:

forming an amorphous semiconductor film comprising silicon and germanium through a sputtering method [over a plastic substrate] on an insulating surface;

[adding a catalytic element into at least a portion of the semiconductor film, said catalytic element being capable of promoting crystallization;]

crystallizing the semiconductor film by irradiating the semiconductor film with a laser light [to form a crystalline semiconductor film] wherein an oxide is formed on the semiconductor film during the irradiation of the laser light; and

removing the oxide from the crystallized semiconductor film,

wherein an inert gas is used as a sputtering gas in the sputtering method, said inert gas being at least one selected from the group consisting of Ar, He, Ne, N.

18. (Twice Amended) A method for manufacturing a semiconductor device comprising [a semiconductor circuit, said method comprising the steps of]:

forming a gate wiring over a [plastic] substrate;

forming a gate insulating film on the gate wiring;

forming an amorphous semiconductor film through a sputtering method on the gate insulating film;

crystallizing the semiconductor film by irradiating the semiconductor film with a laser light [to form a crystalline semiconductor film,] wherein an oxide is formed on the semiconductor film during the irradiation of the laser light; and

removing the oxide from the crystallized semiconductor film,

wherein an inert gas is used as a sputtering gas in the sputtering method, said inert gas being at least one selected from the group consisting of Ar, He, Ne, N.

19. (Twice Amended) A method for manufacturing an electroluminescence display device comprising at least a thin film transistor, said method comprising the steps of:

forming an amorphous semiconductor film through a sputtering method [over a plastic substrate] on an insulating surface;

crystallizing the semiconductor film by irradiating the semiconductor film with a laser light [to form a crystalline semiconductor film] wherein an oxide is formed on the semiconductor film;

removing the oxide from the crystallized semiconductor film;

forming a gate insulating film adjacent to the [crystalline] crystallized semiconductor film;

forming a gate electrode adjacent to the [crystalline] crystallized semiconductor film with the gate insulating film interposed therebetween;

introducing an impurity [region] into the [crystalline] crystallized semiconductor film to form at least a source region, and a drain region [and a channel region between the source and drain regions];

forming at least an interlayer insulating film over the thin film transistor;

forming a [pixel] first electrode over the interlayer insulating film, said pixel electrode being electrically connected to the drain region of the thin film transistor;

forming an EL layer adjacent to the [pixel] first electrode;

forming a [cathode] second electrode adjacent to the EL layer,

wherein an inert gas is used as a sputtering gas in the sputtering method, said inert gas being at least one selected from the group consisting of Ar, He, Ne, N.

33. (Amended) A method according to claim 15, wherein the [catalytic element includes at least an element] metal is at least one selected from a group consisting of Ni, Fe, Co, Pt, Cu and Au.

34. (Amended) A method according to claim 15, wherein the [catalytic element includes at least an element] metal is at least one selected from the group consisting of Ge and Pb.